Applicant : Shunpei Yama Filed : November 8, 2001

Page

: 2

a second insulating layer comprising silicon oxynitride and located over said first insulating layer;

a thin film transistor formed between said first insulating layer and said second insulating layer, said thin film transistor having a semiconductor layer comprising silicon, a gate insulating film, and a gate electrode;

a third insulating layer comprising silicon nitride of silicon oxynitride and located over said second insulating layer;

a fourth insulating layer comprising carbon and located over said third insulating layer;

a light emitting element formed between said third insulating layer and said fourth insulating layer, said light emitting element comprising an anode, an organic compound layer, and a cathode comprising an alkali metal; and

partition layers comprising an insulating material on said third insulating layer, wherein said light emitting element is formed between the partition layers.

4. A light emitting device comprising:

a first insulating layer comprising silicon nitride or silicon oxynitride;

a second insulating layer comprising silicon oxynitride and located over said first insulating layer;

a thin film transistor formed between said first insulating layer and said second insulating layer, said thin film transistor having/a semiconductor layer comprising silicon, a gate insulating film, and a gate electrode;

a third insulating layer comprising silicon nitride or silicon oxynitride and located over said second insulating layer;

a fourth insulating layer comprising carbon and located over said third insulating layer;

a light emitting element formed between said third insulating layer and said fourth insulating layer, said light emitting element comprising an anode, an organic compound layer, and a cathode comprising an alkali metal; and

partition layers comprising an insulating material on said third insulating layer, wherein:

said light emitting element is formed between the partition layers, and

(*) (2)

۱Ū

J. 4

Applicant: Shunpei Yam Filed : November 8, 2001

Page : 3

et No.: 12732-081001 / US5299 Attorney's

said partition layers have a shape in which apupper portion protrudes in a direction parallel to a substrate.

7. A light emitting device comprising:

a first insulating layer comprising silicon nitride or silicon oxynitride;

a second insulating layer comprising silicon oxynigride and located over said first insulating layer;

a thin film transistor formed between said first insulating layer and said second insulating layer, said thin film transistor having a semiconductor layer comprising silicon, a gate insulating film, and a gate electrode;

a third insulating layer comprising silicon nitride or silicon oxynitride and located over said second insulating layer;

a fourth insulating layer comprising carbon and located over said third insulating layer;

a light emitting element formed between said third insulating layer and said fourth insulating layer, said light emitting element comprising an anode, an organic compound layer, and a cathode comprising an alkali metal; and

partition layers comprising an insulating material and located on said third insulating layer,

wherein:

said light emitting element is formed between the partition layers, and said organic compound layer and said cathode do not contact said partition layers.

10. A light emitting device comprising:

a first insulating layer comprising splicon nitride or silicon oxynitride;

a second insulating layer comprising silicon oxynitride and located over said first insulating layer;

a thin film transistor formed between said first insulating layer and said second insulating layer, said thin film transistor having a semiconductor layer comprising silicon, a gate insulating film, and a gate electrode;

o o o 14 ķА ţŌ Applicant: Shunpei Yama Filed: November 8, 2001

Page :

Attorney's let No.: 12732-081001 / US5299

a third insulating layer comprising silicon nitride or silicon oxynitride and located over said second insulating layer; and

a fourth insulating layer comprising carbon and located over said third insulating layer;

a light emitting element formed between said third insulating layer and said fourth insulating layer, said light emitting element comprising an anode, an organic compound layer, and a cathode comprising an alkali metal; and

partition layers comprising an insulating material and located on said third insulating layer,

wherein:

said light emitting element is formed between the partition layers,

the partition layers have a shape in which an upper portion protrudes in a direction parallel to a substrate, and

said organic compound layer and said cathode do not contact said partition layers.

13. A light emitting device comprising:

a substrate;

a gate electrode located over said substrate;

a first insulating layer comprising silicon nitride or silicon oxynitride and located over said gate electrode;

a semiconductor film located over said first insulating film;

a second insulating layer comprising silicon oxynitride and located over said semiconductor film:

a third insulating layer comprising silicon nitride or silicon oxynitride and located over said second insulating film; and

a light emitting element located over said third insulating layer, said light emitting element having an anode, an organic compound layer, and a cathode comprising an alkali metal;

a fourth insulating layer comprising carbon and located over said light emitting element; and

96

HINGE CHANGE CO. I.

Applicant : Shunpei Yama

Filed

: November 8, 2001

Page

: 5

a 7

partition layers comprising an insulating material and located over said third insulating layer,

Attorney's

et No.: 12732-081001 / US5299

wherein said light emitting element is formed between the partition layers.

16. A light emitting device comprising:

a substrate;

a first insulating layer comprising a material selected from the group consisting of silicon nitride and silicon oxynitride and located over said substrate;

thin film transistors formed on said first insulating layer;

a second insulating layer comprising silicon oxynitride and located over said thin film transistors;

a third insulating layer comprising a material selected from the group consisting of silicon nitride and silicon oxynitride and located over said second insulating layer;

light emitting elements arranged in a matrix over said substrate and operationally connected to said thin film transistors, each of the light emitting elements comprising an anode, a cathode comprising an alkali metal, and an organic compound layer between said anode and said cathode;

partition layers formed over/said third insulating layer and extending in parallel; and a fourth insulating layer comprising carbon and formed over said light emitting elements such that each of said light emitting elements is interposed between said third and fourth insulating layers,

wherein said light emitting elements arranged in a same row or a same column of said matrix are disposed between and along adjacent ones of said partition layers.

19. A light emitting device according to claim 16, wherein said partition layers are spaced apart from said cathode and said organic compound layer of said light emitting elements.

20. A light emitting device comprising:

a substrate;

ļ±

Applicant: Shunpei Yam Filed

Page

: 6

: November 8, 2001

a first insulating layer comprising a material selected from the group consisting of silicon nitride and silicon oxynitride and located over said substrate;

Attorney's

et No.: 12732-081001 / US5299

at least one thin film transistor formed on said first ingulating layer;

a second insulating layer comprising silicon oxynitride and located over said thin film transistor;

a third insulating layer comprising a material selected from the group consisting of silicon nitride and silicon oxynitride and located oversaid second insulating layer;

at least one light emitting element operationally connected to said thin film transistor, said light emitting element comprising an anode, a cathode comprising an alkali metal and an organic compound layer between said anode and said cathode;

at least first and second partition layers located over said third insulating layer such that said light emitting element is disposed between said first and second partition layers; and

a fourth insulating layer comprising carbon formed over said light emitting element such that the light emitting element is interposed between said third and fourth insulating layers,

wherein a distance between opposed edges of said first and second partition layers at a top portion of said first and second partition layers is smaller than a distance between opposed edges of said first and second partition layers at a bottom portion of said first and second partition layers.

ſΰ

23. A light emitting device according to claim 20, wherein said partition layers are spaced apart from said cathode and said organic compound layer of said light emitting elements.

ſΨ M